

What is claimed is:

*Sub 81*  
1. A method of treating an eye comprising introducing intraocularly a liquid comprising a perfluorocarbon or substituted derivative thereof.

2. The method of Claim 1 wherein said liquid is introduced into the vitreous of the eye.

*Sub 22*  
3. The method of Claim 2 which is conducted to substantially replace said vitreous.

4. The method of Claim 2 wherein upon the introduction of said liquid said vitreous is withdrawn from the eye.

5. The method of Claim 1 wherein said liquid is introduced into the aqueous of the eye.

*Sub 23*  
6. The method of Claim 5 which is conducted to substantially replace said aqueous.

7. The method of Claim 1 wherein said liquid is introduced into the cornea.

*a*  
8. The method of Claim 7 wherein said liquid is introduced in a sufficient amount to form a <sup>substantially</sup> transparent window in said cornea.

9. The method of Claim 1 wherein said liquid is introduced into the lens.

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10. The method of Claim 9 wherein said liquid is introduced in a sufficient amount to form a <sup>Substantially</sup> transparent window in said lens.

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11. The method of Claim 1 wherein said perfluorocarbon or substituted derivative thereof is in a physical state selected from the group consisting of a neat liquid, an emulsion, a gel, a solution and a suspension.

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12. The method of Claim 1 wherein said liquid <sup>Perfluorocarbon</sup> is a perfluorocyclocarbon.

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13. The method of Claim 12 wherein said perfluorocyclocarbon is selected from the group consisting of perfluoro(methylcyclohexane), perfluoro(1,3-dimethylcyclohexane), perfluoro(decahydronaphthalene), perfluoro(decahydro-1-methylnaphthalene), perfluoro(decahydrodimethylnaphthalene), perfluorodimethyladamantane, perfluorotrimethylbicyclo[3.3.1.]nonane, perfluorotetrahydrodicyclopentadiene, perfluorobicyclo[5.3.0.]decane and perfluorodimethylbicyclo[3.3.1.]nonane, or mixtures thereof.

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14. The method of Claim 1 wherein said liquid <sup>Perfluorocarbon</sup> is radiopaque.

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15. The method of Claim 14 wherein said substituted derivative is selected from the group consisting of a brominated perfluorocarbon and an iodinated perfluorocarbon.

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16. The method of Claim 14 wherein said liquid<sup>perfluorocarbon</sup> is perfluorooctylbromide.

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17. A method of repairing the retina of an eye comprising introducing into the vitreous a liquid comprising a perfluorocarbon or substituted derivative thereof in an amount sufficient to hold the retina against the choroid during said repair.

18. The method of Claim 17 wherein the repair is provided to a detached retina and the detached retina is held against the choroid during the repair.

19. The method of Claim 17 wherein said liquid is removed after said repair.

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20. A diagnostic method comprising introducing into an eye a radiopaque liquid perfluorocarbon or substituted derivative thereof and detecting the radiopacity of the resultant eye.

21. The method of Claim 20 wherein said substituted derivative is selected from the group consisting of a brominated perfluorocarbon and an iodinated perfluorocarbon.

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22. The method of Claim 20 wherein said liquid is <sup>perfluorocarbon</sup> perfluorooctylbromide.

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23. A method of treating an eye comprising introducing intraocularly a transparent liquid perfluorocarbon or substituted derivative thereof.

24. The method of Claim 23 wherein said transparent liquid is a perfluorocyclocarbon.

25. The method of Claim 24 wherein said perfluorocyclocarbon is selected from the group consisting of perfluoro(methylcyclohexane), perfluoro(1,3-dimethylcyclohexane), perfluoro(decahydronaphthalene), perfluoro(decahydro-1-methylnaphthalene), perfluoro(decahydrodimethylnaphthalene), perfluorodimethyladamantane, perfluorotrimethylbicyclo[3.3.1.]nonane, perfluorotetrahydrodicyclopentadiene, perfluorobicyclo[5.3.0.]decane and perfluorodimethylbicyclo[3.3.1.]nonane, or mixtures thereof.

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